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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,556	09/12/2003	Arun Kumar Sinha	056859-0189	6407

22428 7590 11/24/2004  
FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

KEYS, ROSALYND ANN

ART UNIT PAPER NUMBER

1621

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/660,556

**Applicant(s)**

SINHA ET AL.

**Examiner**

Rosalynd Keys

**Art Unit**

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36 and 45-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36 and 45-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/12/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Status of Claims***

1. Claims 36 and 45-50 are pending.  
Claims 36 and 45-50 are rejected.  
Claims 1-35 and 37-44 are cancelled.

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 9, 2004 has been entered.

***Information Disclosure Statement***

3. The information disclosure statement filed March 12, 2004 has been considered.

***Claim Objections***

4. Claims 36 and 45 are objected to because of the following informalities: in line 2 of step a) Pd/c should be Pd/C; in line 2 of step b) in claim 36, trimethoxyphenylpropane is misspelled trimrthoxyphenylpropane; in line 2 of step i) in claim 36, ethyl is misspelled ehtyl; in claim 45, line 2, trimethoxy propane is misspelled trimethoxyp propane. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 36 and 45-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In line 2 of step (g) in claim 36 there is disclosed a solution of brine and 10% bicarbonate solution, however, in the examples the brine and bicarbonate appear to be added separately and not as a solution (see example II on page 19). Further the carbonate was limited to sodium bicarbonate. The applicants have now broadened the carbonates to include other carbonates in addition to sodium carbonate.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 36 and 45-50 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the term mixture after the term concentrated in line 1 of step e) in claim 36; the elements of step f). which were deleted in the amendment filed November 9, 2004
9. Claims 36 and 45-50 are further indefinite because of the presence of 2,4,5-(2,4,5-trimethoxyphenyl) in line 3 of claim 36. Step g) makes reference to the organic layer of step e), however there is no disclosure of an organic layer in step e). Step h) makes

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reference to the organic layer of step f), however there is no disclosure of an organic layer in step f). the phrase "followed by again brine" in line 2 of step g) does not make sense. Step i) makes reference to the residue of step g), however there is no disclosure of a residue in step g). Step j) makes reference to the fractions of step h), however there is no disclosure of fractions in step h). In step k) the formula for  $\alpha$ -asarone is incorrect. The compound having the formula I is 2,4,5-trimethoxyphenylpropane not  $\alpha$ -asarone.

***Response to Amendment***

**Specification**

10. The objection to the specification is withdrawn due to the amendment which to claim 36, which limits the hydrogenation to being carried out in the presence of methanol or ethanol.

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Claim Objections

11. The objection to claim 36 is withdrawn due to the amendment to claim 36, which removes the misspelled terms dihydroasrones and dihydroasrone.

12. The objection to claim 40 is withdrawn since this claim has been canceled.

Claim Rejections - 35 USC § 112, first paragraph

13. The rejection of claim 36 is withdrawn since the deficiencies disclosed in paragraph 6 of the previous office action, mailed March 19, 2004, have been corrected. Further this rejection is withdrawn since the organic solvent of step c has been limited to acetic acid and propionic acid.

14. The rejection of claims 37-44 is withdrawn, since these claims have been cancelled.

Claim Rejections - 35 USC § 112, second paragraph

15. The rejection of claim 36 is withdrawn since the wording "step (c)" in line 2 of step (c) has been changed to "step (b)".

16. The rejection of claims 37-44 is withdrawn, since these claims have been cancelled.

**Conclusion**


17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bohlmann et al. (Archiv der Pharmazie (Weinheim, Germany, May 1982, Vol. 315 (5), pp. 474-6) disclose a method of producing diasarone that is different and unobvious from the instant method.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalyn Keys whose telephone number is 571-272-0639. The examiner can normally be reached on M, R and F 3:00-8:00 pm and T-W 5:30-10:30 am.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Rosalynd Keys  
Primary Examiner  
Art Unit 1621

November 23, 2004